Application No. 09/107,971 Attorney Docket No.: 98-024

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE CEIVED CENTRAL FAX CENTER

JUN 0 2 2004

SUPPLEMENTAL APPEAL BRIEF

OFFICIAL

(Replaces the previous Appeal Briefs in their entirety - no reference is made to the previous Appeal Briefs)

Appellants: Andrew S. Van Luchene Group Art Unit: 3622

Application No.: 09/107,971 Examiner: John L. Young

Filed: June 30, 1998

For: METHOD AND APPARATUS

FOR FACILITATING THE PLAY OF FRACTIONAL

LOTTERY TICKETS

UTILIZING POINT-OF-SALE TERMINALS

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Customer No. 22927

Attorney Docket No. 98-024

Appellants hereby appeal to the Board of Patent Appeals and Interferences from the decision of the Examiner in the Office Action mailed February 2, 2004, which re-opened prosecution after appeal to reject claims 1 - 27 on a newly-cited reference.

This is the third Appeal Brief filed for this application. However, in this Appeal Brief no reference is made to arguments in any prior brief.

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REAL PARTY IN INTEREST

The present application is assigned to Walker Digital, LLC, 1177 High Ridge Road, Stamford, CT 06905.

RELATED APPEALS AND INTERFERENCES

Appellants are aware of the following appeal, which might be considered to directly affect, be directly affected by or have a bearing on the Board's decision in the pending appeal:

Serial No. 09/045,036, filed March 20, 1998, entitled "SYSTEM AND METHOD FOR FACILITATING THE PLAY OF FRACTIONAL LOTTERY TICKETS USING POINT-OF-SALE TERMINALS".

The present application is a continuation-in-part of the above application. Further, although the claims of the two applications are patentably distinct, both appeals involve the same examiner, the same references, and the same general interpretations of the references as applied to several claims.

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STATUS OF CLAIMS

Claims 1 - 27 are pending in the present application and are being appealed.

Claims 1 – 19 stand rejected under 35 U.S.C. § 101 as being directed to nonstatutory subject matter.

Claims 1 - 15 and 20 - 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over a combination of:

- U.S. Patent No. 6,267,670 to Walker;
- U.S. Patent No. 5,772,510 to Roberts; and
- "Heads I Win, Tails You Lose", The Economist, June 13, 1992, ("The Economist");

Claims 16 – 18 and 26 - 27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over a combination of Walker, Roberts and U.S. Patent No. 5,083,784 to Nilssen.

Claim 19 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over a combination of Walker, Roberts, The Economist, and Nilssen.

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STATUS OF AMENDMENTS

No amendments were filed subsequent to final rejection.

SUMMARY OF INVENTION

Generally, according to one aspect of the invention, a computing device such as a store controller determines a monetary value, such as an amount of spare change due to a customer. The store controller also selects a ticket record that includes a set of ticket numbers. Present Application, page 4, lines 16 - 18. The ticket record may be, e.g., a database record which defines a set of lottery ticket numbers that are included on one or more fractional lottery tickets. Present Application, page 11, lines 7 - 9.

Subsequently, the store controller purchases at least one lottery ticket based on the monetary value and the set of ticket numbers. Present Application, page 4, lines 18 – 19.

The store controller then outputs the information to a POS terminal, which prints a fractional lottery ticket redeemable for a portion of the lottery ticket's prize. The fractional lottery ticket includes the ticket numbers and a fractional lottery ticket value that is based on the monetary value. Present Application, page 4, lines 19-22. The fractional lottery ticket value may be, for example, equal to

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the monetary value, or may be the monetary value rounded to the nearest nickel. Present Application, page 4, line 22 - Page 5, line 2. For example, for \$0.26 in change, a customer may be sold a 26% share of a \$1 lottery ticket in lieu of the change due. Present Application, page 3, lines 14 - 16.

After a drawing date for the lottery ticket, the customer redeems the fractional lottery ticket, typically at a POS terminal, if a prize is due. The POS terminal communicates with the store controller, which receives the ticket numbers and the fractional lottery ticket value therefrom. From the received information, the store controller may determine a prize value of the corresponding lottery ticket. The customer is, in turn, provided with a portion of the prize value based on the fractional lottery ticket value. Present Application, page 5, lines 3 – 8. For example, with a 26% share of a \$1 lottery ticket, if the lottery ticket wins, 26% of the corresponding prize is awarded to the customer. Present Application, page 3, lines 14 – 16.

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ISSUES

Whether claims 1 - 19 are unpatentable under 35 U.S.C. § 101 as being directed to nonstatutory subject matter.

Whether claims 1 – 15 and 20 - 25 are unpatentable under 35 U.S.C. § 103(a) as being obvious in light of a combination of Walker, Roberts, and The Economist.

Whether claims 16 – 18 and 26 - 27 are unpatentable under 35 U.S.C. § 103(a) as being obvious in light of a combination of Walker, Roberts and Nilssen.

Whether claim 19 is unpatentable under 35 U.S.C. § 103(a) as being obvious in light of a combination of Walker, Roberts, The Economist and Nilssen.

GROUPING OF CLAIMS

The claims in different groups do not stand and fall together.

Appellants group the pending claims as follows:

Group I - claims 1, 3 - 6, 15, 20, 21, 24, 25;

Group Π - claim 2;

Group III - claims 7 and 8;

Group IV - claims 9;

Group V - claims 10;

Group VI - claims 11 - 13, 22, 23;

Group VII - claim 14;

Group VIII - claims 16 - 19, 26, 27.

Appellants believe that claims in different groups are separately patentable, as explained below.

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ARGUMENT

Summary of Argument

The prior art of record does not suggest the limitations of any independent claim.

In particular, the prior art of record does not suggest the following limitations of independent claims 1, 11, 15 and 20 - 25:

purchasing at least one lottery ticket based on the monetary value and the set of ticket numbers after the step of selecting [a ticket record that includes a set of ticket numbers]

OR

outputting the ticket numbers and a fractional lottery ticket value that is based on the monetary value

With respect to remaining independent claims 16, 26 and 27, the prior art of record does not suggest the following limitations:

determining a total value amount corresponding to a set of ticket numbers

OR

acquiring at least one lottery ticket having the set of ticket numbers based on the total value amount

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In particular, the rejections are little more than unsupported allegations that the limitations are disclosed by various combinations of references, and that the references motivate such combinations. In fact, it is abundantly clear that the references cannot possibly support these allegations.

Accordingly, the rejections are inappropriate and Appellants respectfully request that the Examiner's rejections be reversed.

In the arguments herein, limitations of the claims are indicated in *italics*, and the references of record are indicated by <u>underlining</u>.

In separate arguments of patentability of different Groups, Appellants have, where possible, referred to prior arguments to avoid undue repetition.

Reference is made in the arguments below to:

the "Fourth Office Action" (Office Action mailed February 2, 2004, which re-opened prosecution subsequent to appeal in order to replace Official Notice with existing references).

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The References

The Examiner has relied on a combination of references in the rejection of all claims. However, the references cited by the Examiner, either alone or in combination, do not disclose or suggest all of the limitations of any claim. In fact, the cited references have very little to do with the appealed claims, aside from some mention of either a "lottery ticket" or "change".

Discussed immediately below are the references used in rejecting the appealed claims: Walker, Roberts, The Economist and Nilssen.

The Walker patent

In summary, Walker (which is a grandparent of the present application) is relied upon solely for its reference in its background to a German lottery practice. This German lottery is also discussed in the article "Save the Mark", Financial Times, February 1, 1983, Section I, page 12, cited by Applicants as item N of the IDS field August 19, 1999.

Specifically, Walker, Col. 1, line 66 - Col. 2, line 3 refers to the German practice:

"Some foreign countries (e.g., Germany) allow a lottery player to purchase fractional lottery tickets. However, these lottery systems only allow the player to purchase fixed fractions of certain high-priced lottery tickets (e.g., a half, or a quarter share of a lottery ticket)."

This very practice is described in the "Save the Mark" article, which was cited by Appellants during prosecution of both Walker and the present application. That article states:

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"For if your lottery ticket (price £186 but available in half or quarter shares) wins one of the weekly prizes of up to DM 1m, the organisation will ensure that no awkward taxmen or exchange regulations interfere with your enjoyment of the prize."

The Roberts patent

In summary, Roberts describes a lottery ticket with a blank region, to have printed thereon information necessary to complete the ticket. Abstract, lines 1 - 3; Col. 2, lines 3 - 6. Such necessary information includes 'play data', which determines the win/lose outcome of the ticket. Abstract, lines 3 - 5; Col. 2, lines 6 - 8. More particularly, the 'play data' which is printed in the blank region can be a 'lucky' number. Col. 4, lines 29 - 34. The information necessary to complete the ticket may be in both a bar code format and a human readable format. Col. 4, lines 10 - 18; FIG. 2B.

With such an arrangement, completed lottery tickets are not stored prior to purchase; only during purchase is the non-completed lottery ticket printed with information necessary to provide the purchaser with a completed lottery ticket. Col. 2, lines 25 - 29. This way, if non-completed tickets are stolen, the thief will not be in possession of completed lottery tickets. Col. 2, lines 29 - 31.

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The Economist publication

The Economist is a paragraph that briefly recounts a method to eliminate change in transactions. A shopper randomly chooses a number from 1 to 100, and the cash register does the same. Lines 3 - 5. The two numbers are added together. Lines 5 - 6. Based on this sum, the price is either rounded up or down. Lines 6 - 9. The laws of probability ensure that both parties will get a fair deal in the long run. Lines 9 - 10.

The Nilssen patent

In summary, Nilssen describes a system in which a central entity issues lottery tickets in exchange for sums of money, and the money is used for generating earnings, such as interest or dividends from investments. Abstract. Ticket holders may participate in lottery drawings for the earnings for a preceding period. Abstract. As a result, each lottery ticket is in effect everlasting, participating in lottery drawings on a periodic basis, such as once each week, for an indefinitely long duration. Abstract.

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1. Group I

Group I includes independent claims 1, 20 and 21 and dependent claims 3, 4, 5 and 6.

As discussed below, the rejection of the claims of Group I is flawed because the Examiner has not made a prima facie case of unpatentability of any claim of Group I. The Examiner has not shown all limitations of any claim to be disclosed or suggested by the references. The rejection is also based on improper combinations and modifications of the references without adequate motivation in the prior art for making the proposed combinations and modifications.

Further, no claim of Group I can be deemed obvious in light of the references of record, alone or in any combination, because the cited references, alone or in any combination, cannot be interpreted in a manner that would disclose or suggest the limitations of any pending claim. Further, the prior art of record does not contain any proper motivation to combine or modify the references in any way which renders any claim of Group I obvious.

1.1. Independent Claims 1, 20 and 21

Independent claim 1 is directed to a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal. The method comprises determining a monetary value, and selecting a ticket record that includes a set of ticket numbers.

At least one lottery ticket is purchased based on the monetary value and the set of ticket numbers after the step of selecting. The ticket numbers and a fractional lottery ticket value that is based on the monetary value are output.

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Independent claim 20 is directed to an apparatus, and includes a processor operative to perform steps substantially as described above with respect to method claim 1.

Independent claim 21 is directed to a computer readable medium encoded with processing instructions for implementing a method substantially as described above with respect to method claim 1.

For brevity, the discussion below refers to method claim 1, but the arguments are likewise applicable to claims 3, 4, 5, 6, 20 and 21.

1.2. Advantages of Independent Claim 1

The embodiment of claim 1 provides several advantages not even recognized, much less disclosed or suggested, by the prior art of record, either alone or in combination. These advantages render the claimed subject matter nonobvious over the cited art.

As discussed in the present application, by purchasing at least one lottery ticket based on the monetary value and the set of ticket numbers, an appropriate lottery ticket can be purchased. Such a ticket may be, e.g., one that itself includes the desired set of ticket numbers. Such a ticket may be, e.g., one or more tickets worth at least the monetary value.

By purchasing at least one lottery ticket based on the monetary value and the set of ticket numbers after the step of selecting [a ticket record that includes a set of ticket numbers], an appropriate lottery ticket can be purchased after ticket numbers have been selected. Thus, an appropriate lottery ticket can be purchased, e.g., once a fractional lottery ticket with those numbers has been sold to a customer.

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PATENT APPEAL
Technology Center 3600

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By outputting the ticket numbers and a fractional lottery ticket value that is based on the monetary value, a 'fractional' lottery ticket may be created and provided, e.g., to a customer. For example, for 0.26, the customer may be sold a 26% share of a \$1 lottery ticket. for 0.26 in change, a customer may be sold a 26% share of a \$1 lottery ticket in lieu of the change due. Present Application, page 3, lines 14-16.

Thus, for example, a purchaser need not be constrained to purchase lottery tickets in only multiples of full denominations (e.g., only in multiples of \$1 for \$1 tickets). This affords the purchaser more flexibility, and allows merchants to sell such fractional lottery tickets at many, differing prices and in a greater variety of ways.

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

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1.3. No Prima Facie Showing of Unpatentability of the Claims of Group I Applicable Law

A reading of the rejections of the claims of the Group reveals that the Examiner has consistently ignored or misinterpreted the limitations of the claims. Several limitations are not disclosed or suggested by the references of record. Accordingly, the Examiner has not presented a prima facie case of obviousness of any claim of the Group.

The Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art. In re Fritch, 972 F.2d 1260, 1265 (Fed. Cir. 1992). To reject claims in an application under section 103, an examiner must show an unrebutted *prima facie* case of obviousness. In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998). If examination at the initial stage does not produce a prima facie case of unpatentability, then without more the applicant is entitled to grant of the patent. In re Oetiker, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

The factual predicates underlying an obviousness determination include the scope and content of the prior art, the differences between the prior art and the claimed invention, and the level of ordinary skill in the art. In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998). The secondary considerations are also essential components of the obviousness determination. In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998).

When a rejection is based on a combination of references, the Examiner can satisfy the prima facie burden only by showing some objective teaching leading to the purported combination of references. In re Fritch, 972 F.2d 1260, 1265 (Fed. Cir. 1992). Lacking a motivation to combine references, there is no prima facie case of obviousness. In re Rouffet, 149 F.3d 1350, 1358 (Fed. Cir. 1998).

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All findings of fact by the U.S. Patent and Trademark Office must be supported by substantial evidence within the record. In re Gartside, 203 F.3d 1305, 1315, 53 USPQ2d 1769, 1775 (Fed. Cir. 2000). The Supreme Court has described "substantial evidence" in the following manner:

"substantial evidence is more than a mere scintilla. It means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion. . . . Mere uncorroborated hearsay or rumor does not constitute substantial evidence."

Consolidated Edison Co. v. NLRB, 305 U.S. 197, 229, 83 L. Ed. 126, 59 S. Ct. 206 (1938);

See also, Dickinson v. Zurko, 527 U.S. 150, 162, 50 U.S.P.Q.2D 1930, 144 L. Ed. 2d 143, 119 S. Ct. 1816 (1999) ("Zurko III").

Similarly "review under this standard involves an examination of the record as a whole, taking into consideration evidence that both justifies and detracts from the agency's decision." Universal Camera Corp. v. NLRB, 340 U.S. 474, 487-88, 95 L. Ed. 456, 71 S. Ct. 456 (1951); Zurko III, 527 U.S. at 162. "[D]eficiencies of the cited references cannot be remedied by the Board's general conclusions about what is 'basic knowledge' or 'common sense." In re Zurko, 258 F.3d 1379, 1385, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001); In re Lee, 277 F.3d 1338,1344, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002).

Finally, during examination, claims are given their broadest reasonable interpretation consistent with the specification. In re Hyatt, 211 F.3d 1367 (Fed. Cir. 2000). The "PTO applies to verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the

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written description contained in applicant's specification." In re Morris, 127 F.3d 1048, 1054-55 (Fed. Cir. 1997).

1.3.1. No showing that the references suggest purchasing at least one lottery ticket based on the monetary value and the set of ticket numbers after the step of selecting [a ticket record that includes a set of ticket numbers]

The Examiner has not shown that the references, alone or in combination, suggest purchasing at least one lottery ticket based on the monetary value and the set of ticket numbers after the step of selecting [a ticket record that includes a set of ticket numbers]. The closest the Examiner comes is a conclusory statement that Walker "shows" that the method of claim 1 "was well known in the art because it would have been obvious" Fourth Office Action, pages 5 - 6. In fact, Walker lacks any hint of the above limitation, much less the entirety of claim 1.

Nothing in Walker even hints at purchasing a lottery ticket based on anything, much less based on the monetary value and the set of ticket numbers, much less purchasing after selecting a ticket record.

Roberts likewise does not suggest purchasing at least one lottery ticket based on the monetary value and the set of ticket numbers after the step of selecting [a ticket record that includes a set of ticket numbers]. At best, Roberts describes that purchasers purchase lottery tickets. See Abstract.

The Economist has nothing at all to do with tickets, much less purchasing at least one lottery ticket.

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1.3.2. N sh wing that the references suggest outputting the ticket numbers and a fractional lottery ticket value that is based on the monetary value

The Examiner has not shown that the references, alone or in combination, suggest outputting the ticket numbers and a fractional lottery ticket value that is based on the monetary value.

The Examiner offers as evidence the following portions of Roberts:

FIG. 2B, element 20b; and Col. 4, lines 5-65.

FIG. 2B, element 20b of Roberts is ticket completion information printed on a ticket in human readable format. In FIG. 2B, this ticket completion information is represented as digits.

Col. 4, lines 5-65 of Roberts generally describes the printing of a lottery ticket, in particular the printing of additional information in addition to information pre-printed on the ticket. Subsequently, it may then be determined if the ticket has won.

Simply put, whatever may be output in Roberts is not a fractional lottery ticket value that is based on the monetary value. For example, the ticket completion information (Fig. 2B, element 20b) in human readable format "identifies the terminal 14 along with the date and the time of day the ticket was processed." Col. 4, lines 51 - 53. Thus, this ticket completion information clearly has nothing to do with a fractional lottery ticket value, much less a fractional lottery ticket value that is based on the monetary value.

Thus, in summary, the Examiner has not shown that the references, alone or in combination, suggest outputting the ticket numbers and a fractional lottery ticket value that is based on the monetary value.

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1.3.3. No showing of a proper motivation to combine the references

The Examiner simply has not shown a motivation in the prior art of record to modify or combine the disparate references in the way suggested by the Examiner, or in any other manner that renders the claims obvious.

Applicable Law

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. In re Fine, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 21 USPQ2d 1941 (Fed. Cir. 1992). Furthermore, particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed. In re Kotzab, 217 F.3d 1365, 1371, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000).

A finding of obviousness requires that the art contain something to suggest the desirability of the proposed combination. In re Grabiak, 769 F.2d 729, 732 (Fed. Cir. 1985). In the absence of such a showing, there is inadequate support for the position that the proposed modification would *prima facie* have been obvious. Id. The absence of such a suggestion to combine is dispositive in an obviousness determination. Gambro Lundia AB v. Baxter Healthcare Corp., 110 F.3d 1573, 1579 (Fed. Cir. 1997).

When the art in question is relatively simple, the opportunity to judge by hindsight is particularly tempting. Consequently, the tests of whether to combine references need to be applied rigorously. McGinley v. Franklin Sports, Inc., 262

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F.3d 1339, 1352 (Fed. Cir. 2001). In each case the factual inquiry whether to combine references must be thorough and searching. Id., at 1352 - 53.

Facts

The Examiner has provided two motivations to combine the <u>Walker</u>, Roberts and <u>The Economist references</u>.

First, it is asserted that one of ordinary skill in the art at the time the invention was made would have combined Roberts with Walker because "such combination would have provided means for '[sending] ... ticket completion information necessary to provide a completed lottery ticket ... ' (See Roberts (col. 6, 11. 54 – 55))." Fourth Office Action, page 6.

Second, it is asserted that one of ordinary skill in the art at the time the invention was made would have combined The Economist with Walker because "such combination would have provided means for 'determining a monetary value ...' (See The Economist (p. 1))." Fourth Office Action, page 7.

Both motivations fail for three reasons:

- (a) neither motivation would actually have prompted one to make the proposed combination;
- (b) neither combination would in any way further the proposed motivation; and
- (c) neither combination has anything to do with the embodiment of claim 1, as discussed above in Sections 1.3.1 and 1.3.2.

With respect to reason (a), the first motivation, "providing a means for sending ticket completion information", would not cause one to seek out the cited portions of Walker, which are directed to the purchase of fractional lottery tickets, Group I

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much less the particular practice of the German lottery. This has nothing to do with "ticket completion information".

Further with respect to reason (a), the second motivation, "providing a means for determining a monetary value", would not cause one to seek out the cited portions of Walker. In fact, there is no way in which Walker would appear to fit with the system disclosed in The Economist. Also, to the extent The Economist purportedly suggests such a feature, it could not then provide a motivation to combine it with another reference, merely to "provide" what the single reference already purportedly "suggests".

With respect to reason (b), the first combination (Walker and Roberts) does not further the proposed motivation of "providing a means for sending ticket completion information". The cited portion of Walker does not "provide a means for sending" anything, nor does Roberts.

Further with respect to reason (b), the second combination (Walker and The Economist) does not further the proposed motivation of "providing a means for determining a monetary value". Whatever means in The Economist for determining a monetary value would seem to be unaltered by the cited portions of Walker.

With respect to reason (c), the first and second combinations (as well as any combination of the references) have nothing to do with the embodiment of claim 1. Further, as described above, any such combination would still lack several features of claim 1, and these features have significant advantages, also as explained above. Finally, any such combination would not solve any the problems addressed by the embodiment of claim 1.

Thus the Examiner has not shown a motivation in the prior art of record to modify or combine the references in any manner that renders the claims of the Group obvious.

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1.3.4. Nonanalogous References

In order to rely on a reference as a basis for rejection of the applicant's invention, the reference must either be in the field of the applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned. In re Oetiker, 977 F.2d 1443, 1447 (Fed. Cir. 1992).

In Roberts, if non-completed tickets are stolen, the thief will not be in possession of completed lottery tickets. Col. 2, lines 29 - 31.

In contrast, The Economist is directed to a method to eliminate the need for change in transactions. Lines 1-3.

None of the above references is in the field of the applicant's endeavor, and none of the above references is reasonably pertinent to the particular problem addressed by the embodiment of the claims of the Group, or of any other claim.

1.4. The Claims are Statutory

The proper legal standard for statutory subject matter was not applied to the rejected claims. In fact, applying the proper legal standard demonstrates that all claims are directed to statutory subject matter.

In addition, the terseness of the rejection and lack of any analysis renders the rejection hopelessly vague and unreviewable.

1.4.1. The Basis for the Rejection

As best as Appellants understands the rejection of the claims for being directed to non-statutory subject matter, the basis for that rejection is that:

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the "claims are not limited by language within the technological arts ... to a useful, concrete and tangible application ..." (Fourth Office Action, pages 3 - 4)

AND

"the claim language is merely non-functional descriptive material disembodied from a concrete tangible and useful result" (Fourth Office Action, page 4)

To the extent the rejection actually applied a standard that requires additional criteria or otherwise departs from the requisite legal analysis under Section 101, the rejection is flawed.

Further, to the extent the rejection is based on a standard that departs from the policy of the U.S. Patent and Trademark Office without a rational basis, that standard is arbitrary.

1.4.2. The Proper Legal Test for Statutory Subject Matter

Whether a patent claim is directed to statutory subject matter under 35 U.S.C. § 101 is a question of law. AT & T, 172 F.3d at 1355. The legal test for the presence of statutory subject matter is only that a claimed process or apparatus produce a "useful, concrete and tangible result". See, e.g., State Street Bank & Trust Co. v. Signature Fin. Group, Inc., 149 F.3d 1368, 1375 (Fed. Cir. 1998), cert. denied, 525 U.S. 1093, 142 L. Ed. 2d 704, 119 S. Ct. 851 (1999) ("For purpose of our analysis, as noted above, claim 1 is directed to a machine programmed with the Hub and Spoke software and admittedly produces a 'useful, concrete, and tangible result.' ... This renders it statutory subject matter, even if the

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useful result is expressed in numbers, such as price, profit, percentage, cost, or loss."); AT & T Corp. v. Excel Communications, Inc., 172 F.3d 1352, 1361 (Fed. Cir. 1999) ("the focus is understood to be not on whether there is a mathematical algorithm at work, but on whether the algorithm-containing invention, as a whole, produces a tangible, useful, result."); See also, State Street Bank at 1373 ("In Alappat, we held that data, transformed by a machine through a series of mathematical calculations to produce a smooth waveform display on a rasterizer monitor, constituted a practical application of an abstract idea ... because it produced 'a useful, concrete and tangible result'--the smooth waveform); See also, State Street Bank at 1373 ("in Arrhythmia Research Technology Inc. ..., we held that the transformation of electrocardiograph signals from a patient's heartbeat by a machine through a series of mathematical calculations constituted a practical application of an abstract idea ... because it corresponded to a useful, concrete or tangible thing--the condition of a patient's heart").

While other criteria, if satisfied, may be useful in indicating the presence of a "useful, concrete and tangible result" (and therefore indicate that a claim is statutory), the absence of such criteria does not preclude a finding of statutory subject matter. Such other criteria are not requirements, but merely some of several ways that can demonstrate that an invention produces a useful, concrete and tangible result.

For example, a physical transformation by a claimed process is one example (but not a requirement) of how a mathematical algorithm may bring about a useful application. AT & T Corp., 172 F.3d at 1357, 50 USPQ2d at 1452. See also, Diehr, 450 U.S. at 192 (the "e.g." signal denotes that physical transformation is an example, not an exclusive requirement for satisfying § 101); Arrhythmia Research Tech., 958 F.2d at 1060, 22 USPQ2d at 1039 (Fed. Cir. 1992) (the transformation simply confirmed that Arrhythmia's method claims satisfied § 101 because the *Group I*

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method produced a number which had specific meaning - a useful, concrete, tangible result - not a mathematical abstraction).

Likewise, physical limitations are perhaps helpful, but are not necessary to render a claim statutory. AT&T at 1359 ("Whatever may be left of the earlier test, if anything, this type of physical limitations analysis seems of little value ...")

Certain features are not helpful to the proper analysis, and have no bearing on the presence of statutory subject matter. For example, whether a result of a claim is expressed in numbers makes no difference. State Street Bank, 149 F.3d at 1374, 47 USPQ2d at 1602 ("[E]ven if the useful result is expressed in numbers, such as price, profit, percentage, cost or loss", the invention that produces that result is statutory); Arrhythmia Research Tech. Inc. v. Corazonix Corp., 958 F.2d 1053, 1060, 22 U.S.P.Q.2D 1033, 1039 (Fed. Cir. 1992) ("That the product is numerical is not a criterion of whether the claim is directed to statutory subject matter."). When a mathematical algorithm included within a claimed process is "applied to produce a number which had specific meaning - a useful, concrete, tangible result - not a mathematical abstraction", that process claim satisfies § 101. AT & T Corp., 172 F.3d at 1357, 50 USPQ2d at 1452, citing Arrhythmia Research Tech. v. Corazonix Corp., 958 F.2d 1053, 1060, 22 USPQ2d 1033, 1039 (Fed. Cir. 1992).

Under the proper standard, claims have been found statutory because they produced useful results such as "a final share price", State Street Bank, 149 F.3d at 1373, 47 USPQ2d at 1601, a "value of a PIC indicator" which represents "information about the call recipient's PIC", AT&T Corp., 172 F.3d at 1357, 50 USPQ2d at 1452; and a condition of a patient's heart, Arrhythmia Research Tech. v. Corazonix Corn. 958 F.2d 1053.

The threshold for utility is not high – an invention is "useful" under Section 101 if it is capable of providing some identifiable benefit.

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1.4.3. The Claims Meet the Standard for Statutory Subject Matter

The pending claims produce a useful, concrete and tangible result. The claims of the Group include the limitation of outputting the ticket numbers and a fractional lottery ticket value. As explained in the Present Application, outputting such data results in a useful, concrete and tangible result – something which many customers would like to purchase.

The ticket numbers and a fractional lottery ticket value are not abstract, disembodied numbers, but instead have a specific meaning and correspond to a useful, concrete or tangible result - something which motivates people to make a purchase (e.g., of a lottery ticket). The processes claimed can by no stretch of the imagination be classified as "abstract ideas", and are thus properly defined statutory processes.

It is also worth noting that the requirement for a "useful invention" is to be evaluated for the invention, and is not dependent on the breadth of the claims. Thus, if one species of an invention claimed as a genus is found to be "useful", utility for the genus is established. Raytheon Co. v. Roper Corp., 724 F.2d 951, 958, 220 USPQ 592, 598 (Fed. Cir. 1983), cert. denied, 469 U.S. 835 (1984) ("When a properly claimed invention meets at least one stated objective, utility under § 101 is clearly shown."). Utility is to be evaluated in a simple "yes" or "no" fashion (i.e., does the invention as claimed possess or not possess utility). There is no subjective test for "utility" that must be deemed to be commensurate with the breadth of the claims being sought to be patented.

Moreover, the scope of the claims as presented encompass a variety of specific implementations of the claimed processes. Certain of these embodiments implicate the use of computers in the processes. These "computer-based" species Group I

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clearly fall within the broader generic definition of the claimed processes. Given that utility for a genus may be established through a recitation of utility of a species within that genus, a rejection that the generically claimed processes lack utility is clearly improper.

1.4.4. The Examiner Applied a Test Which is Contrary to Law

A claim need not be "limited by language in the technological arts"

There is no authority requiring claims to be "limited by language in the technological arts", whatever that may mean. The cited decisions in In re Waldhaum, In re Musgrave and In re Johnston do not set forth any such test. To the extent these thirty-year-old cases have any remaining precedential value, they merely state that a claim is statutory if it is in the technological (i.e. useful) arts. Since the present claims produce a useful, concrete and tangible result, they are per se directed to useful arts.

Similarly MPEP 2106 (IV)(2)(b) sets forth no requirement that claims be "limited by language in the technological arts". That section contains no hint of the requirement applied by the Examiner. In fact, that section refers to the same requirement under Section 101 which Appellants indicated in Section 1.4.2 above:

"The claimed invention as a whole must accomplish a practical application. That is, it must produce a 'useful, concrete and tangible result.' "

MPEP 2106(II)(A).

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"A claim is limited to a practical application when the method, as claimed, produces a concrete, tangible and useful result; i.e., the method recites a step or act of producing something that is concrete, tangible and useful."

MPEP (IV)(B)(2)(b)(ii).

In fact, there are only five references of any sort to "technological arts" in MPEP 2106. The term "technological arts" is not clarified whatsoever, and certainly not as contemplated by the Examiner. None of these terse references in the MPEP includes any intimation that there is any "technological arts" requirement separate and apart from the "useful, concrete and tangible result" requirement discussed above and explicitly provided in and described by the MPEP.

The five references to "technological art" are:

"Only when the claim is devoid of any limitation to a practical application in the technological arts should it be rejected under 35 U.S.C. 101."

MPEP (II)(A).

"A claim limited to a machine or manufacture, which has a practical application in the technological arts, is statutory. In most cases, a claim to a specific machine or manufacture will have a practical application in the technological arts."

MPEP (IV)(B)(2)(a).

"If a claim does not clearly fall into one or both of the safe harbors
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Physical Objects or Activities], the claim may still be statutory if it is limited to a practical application in the technological arts."

MPEP (IV)(B)(2)(b)(i).

MPEP (IV)(B)(2)(b)(ii) is entitled "Computer-Related Processes Limited to a Practical Application in the Technological Arts". However, the only other use of that term is:

"For such subject matter [a computer-related process] to be statutory, the claimed process must be limited to a practical application of the abstract idea or mathematical algorithm in the technological arts."

MPEP (IV)(B)(2)(b)(ii).

For all of the above reasons, the proper legal standard for statutory subject matter was not applied to the rejected claims, which are all are directed to statutory subject matter.

1.4.5. The Examiner Has Not Even Applied His Test to the Claims

Other than the conclusory statement that the claims fail to satisfy the standard described above, there is no explanation of why the claims are deemed to "not limited by language within the technological arts".

The Examiner has not set forth in the record any factual findings, such as:

 how various claim terms have been construed (e.g., the terms "point-of-sale terminal", "lottery ticket", "ticket record", "ticket numbers" and "fractional lottery ticket value"; and

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what exactly constitutes "language within the technological arts".

Absent such findings, the result of the test purportedly applied cannot be evaluated, but can only be considered arbitrary.

Finally, there is no explanation of exactly what "claim language" is "merely non-functional descriptive material disembodied from a concrete tangible and useful result". Nevertheless, Appellants note that the "non-functional descriptive material" doctrine is applied to printed matter, and has no applicability here.

In conclusion, the Examiner has not set forth a *prima* facie case of unpatentability of any claim of the Group. Accordingly, for at least those reasons, the claims of the Group are patentable in view of the cited references.

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2. Group II

SEPARATE ARGUMENT OF PATENTABILITY

Group II includes dependent claim 2. Dependent claim 2 depends from independent claim 1, discussed above in Group I. Accordingly, all arguments above with respect to Group I are equally applicable to Group II, and the claims of Group II are patentable at least for the same reasons given above for Group I.

Moreover, additional arguments are provided below for the patentability of the claims of Group II, regardless of the patentability of the claims of Group I.

As discussed below, the rejection of the claims of Group II is flawed because the Examiner has not made a prima facie case of unpatentability of any claim of Group II. The Examiner has not shown all limitations of any claim to be disclosed or suggested by the references. The rejection is also based on improper combinations and modifications of the references without adequate motivation in the prior art for making the proposed combinations and modifications.

Further, no claim of Group II can be deemed obvious in light of the references of record, alone or in any combination, because the cited references, alone or in any combination, cannot be interpreted in a manner that would disclose or suggest the limitations of any pending claim. Further, the prior art of record does not contain any proper motivation to combine or modify the references in any way which renders any claim of Group II obvious.

2.1. Dependent Claim 2

Dependent claim 2 is directed to a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal. The method comprises

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determining a monetary value based on an amount of change due for a purchase.

A ticket record that includes a set of ticket numbers is selected.

At least one lottery ticket is purchased based on the monetary value and the set of ticket numbers after the step of selecting. The ticket numbers and a fractional lottery ticket value that is based on the monetary value are output.

2.2. Advantages of Dependent Claim 2

In addition to the advantages discussed above in Section 1.2 with respect to Group I, the embodiment of claim 2 provides several advantages not even recognized, much less disclosed or suggested, by the prior art of record, either alone or in combination. These advantages further render the claimed subject matter nonobvious over the cited art.

Because at least one lottery ticket is purchased based on the monetary value, and this monetary value is based on an amount of change due for a purchase, the purchasing of the ticket(s) is tied to an amount of change due for a purchase. This facilitates the play of fractional lottery tickets.

There are numerous advantages to providing a fractional lottery ticket in exchange for change due. For example, dispensing and collecting coins is costly and burdensome. Furthermore, many customers consider coins to be dirty, and would prefer not to handle them. Thus, many customers will find the exchange of change due for a fractional lottery ticket to be very desirable. Application, page 3, lines 15-22. Accordingly, many customers will willingly purchase a fractional lottery ticket in exchange for change due.

An amount paid (e.g., change due) could, for instance, dictate the size of the portion of the ticket, and thus the corresponding value of the ticket if it is a

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winning ticket. For example, for \$0.26, the customer may be sold a 26% share of a \$1 lottery ticket. Application, page 3, lines 11 - 14.

Similarly, by outputting ... a fractional lottery ticket value that is based on the monetary value, and this monetary value is based on an amount of change due for a purchase, the fractional lottery ticket value is based on the amount of change due. Again, this facilitates the play of fractional lottery tickets, which have numerous advantages.

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

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2.3. No Prima Facie Showing of Unpatentability of the Claims of Group II

A reading of the rejections of the claims of the Group reveals that the Examiner has consistently ignored or misinterpreted the limitations of the claims. Several limitations are not disclosed or suggested by the references of record. Accordingly, the Examiner has not presented a prima facie case of obviousness of any claim of the Group.

2.3.1. No showing that the references suggest determining a monetary value based on an amount of change due for a purchase

On page 7 of the Fourth Office Action, the Examiner concedes that Walker does not disclose such a feature, but The Economist "shows elements that suggest 'determining a monetary value based on an amount of change due for a purchase'"

Though a goal of the system described in The Economist is to eliminate change in transactions, nothing in this system is based on an amount of change due, much less a monetary value. The price in this system is rounded up or down based on two numbers between 1 and 100, chosen by the shopper and cash register respectively. Thus, even if this rounded price is considered a monetary value which is determined, this rounded price is based on three values only: the original (unrounded) purchase price, the number chosen by the shopper, and the number chosen by the cash register. In other words, the rounded price in The Economist is not based on an amount of change due for a purchase.

In fact, the amount of change due is never determined in <u>The Economist</u>.

The Economist furthermore teaches away from determining an amount of change

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due by ignoring any amount of change that would have been due, and instead randomly rounding the price.

Further, as discussed above, a reference only "suggests" a limitation when there is some showing in the references of record that the prior art would have provided a motivation to modify a reference to result in the "suggested" limitations. There is no factual finding, purported or otherwise, that would motivate one of ordinary skill in the art to make the proposed modification of The Economist to yield what is purportedly "suggested" by The Economist. The lack of any motivation to combine or modify the references is discussed below.

2.3.2. No showing that the references suggest purchasing at least one lottery ticket based on the monetary value, which is in turn based on an amount of change due for a purchase

Claim 2 refines the step of determining a monetary value by determining a monetary value based on an amount of change due for a purchase. Thus in claim 2 the other steps that involve the monetary value are affected. The Examiner has ignored these effects and thus has ignored limitations of claim 2.

There has been no showing or attempted showing that any reference discloses or suggests purchasing at least one lottery ticket based on the monetary value, which is in turn based on an amount of change due for a purchase. As described in Section 1.3.1 above, the Examiner has not shown that any reference or combination thereof suggests purchasing at least one lottery ticket based on the monetary value. The Examiner has not even attempted to show that any reference suggests such purchasing ... based on an amount of change due for a purchase.

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2.3.3. N showing that the references suggest outputting the ticket numbers and a fractional lottery ticket value that is based on the monetary value, which is in turn based on an amount of change due for a purchase

There has been no showing or attempted showing that any reference discloses or suggests outputting the ticket numbers and a fractional lottery ticket value that is based on the monetary value, which is in turn based on an amount of change due for a purchase. As described in Section 1.3.2 above, the Examiner has not shown that any reference or combination thereof suggests outputting the ticket numbers and a fractional lottery ticket value that is based on the monetary value. The Examiner has not even attempted to show that any reference suggests that such a fractional lottery ticket value is based on an amount of change due for a purchase.

2.3.4. No showing of a proper motivation to combine the references

The Examiner simply has not shown a motivation in the prior art of record to modify or combine the disparate references in the way suggested by the Examiner, or in any other manner that renders the claims obvious.

In addition to the deficiencies described in Section 1.3.3 above, the Examiner has asserted with respect to claim 2 that one of ordinary skill in the art at the time the invention was made would have combined The Economist with Walker because "such combination would have provided means for 'determining a monetary value ...' (See The Economist (p. 1))." Fourth Office Action, page 7.

The proposed combination (as well as any combination of the references) has nothing to do with the embodiment of claim 2. The Economist has nothing to do with tickets, much less fractional lottery tickets. Similarly, Walker and The Economist have nothing to do with each other.

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Further, as described above, any such combination would still lack several features of claim 2, and these features have significant advantages, also as explained above. Further, any such combination would not solve any the problems addressed by the embodiment of claim 2.

Thus the Examiner has not shown a motivation in the prior art of record to modify or combine the references in any manner that renders the claims of the Group obvious.

2.4. The Claims are Statutory

As described in Sections 1.4 - 1.4.5 above, the claims are directed to statutory subject matter.

In conclusion, the Examiner has not set forth a *prima* facie case of obviousness of the claims of Group II, none of the references (alone or in combination) disclose or suggest the limitations of the claims of Group II, and none of the references (alone or in combination) possess the advantages conferred by those limitations, as discussed in detail above in Section 2.2 "Advantages of Dependent Claim 2". Accordingly, for at least those reasons, the claims of Group II are patentable in view of the cited references.

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3. Group III

SEPARATE ARGUMENT OF PATENTABILITY

Group III includes dependent claims 7 and 8. Dependent claim 7 depends from independent claim 1, which is discussed above in Group I. Dependent claim 8 depends from claim 7.

Accordingly, all arguments above with respect to Group I are equally applicable to Group III, and the claims of Group III are patentable at least for the same reasons given above for Group I. Moreover, additional arguments are provided below for the patentability of the claims of Group III, regardless of the patentability of the claims of Group I.

For brevity, the discussion below refers to claim 7, but the arguments are likewise applicable to claim 8.

3.1. Dependent Claim 7

Dependent claim 7 is directed to a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal. The method comprises determining a monetary value, and selecting a ticket record that includes a set of ticket numbers.

At least one lottery ticket is purchased based on the monetary value and the set of ticket numbers after the step of selecting. The ticket numbers and a fractional lottery ticket value that is based on the monetary value are output. A total value amount of the selected ticket record is increased in accordance with the fractional lottery ticket value.

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3.2. Advantag s of Dependent Claim 7

The embodiment of claim 7 provides several advantages not even recognized, much less disclosed or suggested, by the prior art of record, either alone or in combination.

In addition to the advantages discussed above with respect to Group I, by increasing a total value amount of the selected ticket record in accordance with the fractional lottery ticket value, the selected ticket record may be adjusted to reflect the value of a fractional lottery ticket that is sold. Thus, the selected ticket record may indicate, e.g., when additional tickets should be acquired.

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

3.3. No Prima Facie Showing of Unpatentability of the Claims of Group III

A reading of the rejections of the claims of the Group reveals that the Examiner has consistently ignored or misinterpreted the limitations of the claims. Several limitations are not disclosed or suggested by the references of record. Accordingly, the Examiner has not presented a prima facie case of obviousness of any claim of the Group.

3.3.1. No showing that the references suggest increasing a total value amount of the selected ticket record in accordance with the fractional lottery ticket value

On page 10 of the <u>Fourth Office Action</u>, the Examiner concedes that <u>Walker</u> does not disclose such a feature, but <u>The Economist</u> "shows elements that suggest" such a feature.

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Clearly, the single paragraph disclosure of The Economist has nothing to do with tickets, ticket records or fractional lottery tickets, much less increasing anything in accordance with a fractional lottery ticket value.

Further, as discussed above, a reference only "suggests" a limitation when there is some showing in the references of record that the prior art would have provided a motivation to modify a reference to result in the "suggested" limitations. There is no factual finding, purported or otherwise, in the record that would motivate one of ordinary skill in the art to make the proposed modification of The Economist to yield what is purportedly "suggested" by The Economist. The lack of any motivation to combine or modify the references is discussed below.

3.3.2. No showing of a proper motivation to combine the references

The Examiner simply has not shown a motivation in the prior art of record to modify or combine the disparate references in the way suggested by the Examiner, or in any other manner that renders the claims obvious.

In addition to the deficiencies described in Section 1.3.3 above, the Examiner has asserted with respect to claim 7 that one of ordinary skill in the art at the time the invention was made would have combined The Economist with Walker because "such combination would have provided means for 'determining a monetary value.' (See The Economist (p. 1))." Fourth Office Action, page 11.

The proposed combination (as well as any combination of the references) has nothing to do with the embodiment of claim 7. The Economist has nothing to do with tickets, much less fractional lottery tickets. Similarly, Walker and The Economist have nothing to do with each other.

Further, as described above, any such combination would still lack several features of claim 7, and these features have significant advantages, also as

Group III

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explained above. Further, any such combination would not solve any the problems addressed by the embodiment of claim 7.

Thus the Examiner has not shown a motivation in the prior art of record to modify or combine the references in any manner that renders the claims of the Group obvious.

3.4. The Claims of Group III are Allowable Over the Cited References

As described above, the Examiner has failed to provide a prima facie showing of obviousness. In addition, the references cannot be combined in any manner that would render the claims of the Group obvious.

3.4.1. The references do not suggest increasing a total value amount of the selected ticket record in accordance with the fractional lottery ticket value

The Economist does not even hint at lottery tickets at all. Roberts and Walker do not describe fractional lottery tickets, or total value amounts, much less increasing a total value amount of a selected ticket record based on anything related in any way to a fractional lottery ticket value.

3.5. The Claims are Statutory

As described in Sections 1.4 - 1.4.5 above, the claims are directed to statutory subject matter.

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In conclusion, the Examiner has not set forth a *prima* facie case of obviousness of the claims of Group III, none of the references (alone or in combination) disclose or suggest the limitations of the claims of Group III, and none of the references (alone or in combination) possess the advantages conferred by those limitations, as discussed in detail above in Section 3.2 "Advantages of Dependent Claim 7". Accordingly, for at least those reasons, the claims of Group III are patentable in view of the cited references.

Group III

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4. Group IV

SEPARATE ARGUMENT OF PATENTABILITY

Group IV includes dependent claim 9. Dependent claim 9 depends from independent claim 1, discussed above in Group I. Accordingly, all arguments above with respect to Group I are equally applicable to Group IV, and the claims of Group IV are patentable at least for the same reasons given above for Group I.

Moreover, additional arguments are provided below for the patentability of the claims of Group IV, regardless of the patentability of the claims of Group I.

4.1. Dependent Claim 9

Dependent claim 9 is directed to a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal. The method comprises determining a monetary value, and selecting a ticket record that includes a set of ticket numbers. The selected ticket record has an amount to round up at least as great as a fractional lottery ticket value.

At least one lottery ticket is purchased based on the monetary value and the set of ticket numbers after the step of selecting. The ticket numbers and the fractional lottery ticket value that is based on the monetary value are output.

4.2. Advantages of Dependent Claim 9

The embodiments of claim 9 provide several advantages not even recognized, much less disclosed or suggested, by the prior art of record, either alone or in combination.

Group IV

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In addition to the advantages discussed above with respect to Group I, by selecting a ticket record having an amount to round up at least as great as the fractional lottery ticket value, a ticket record with sufficient value remaining to allocate to another fractional lottery ticket may be selected.

As described in the present application, an amount to round up may be, e.g., a minimal amount that, when added to the total value amount of the ticket record, yields a sum that is a whole-number multiple of the corresponding lottery ticket price. Present Application, page 11, lines 14 - 16. This provides information regarding, e.g., how many tickets must be purchased to cover the fractional lottery tickets represented by the ticket record.

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

4.3. No Prima Facie Showing of Unpatentability of the Claims of Group IV

A reading of the rejections of the claims of the Group reveals that the Examiner has consistently ignored or misinterpreted the limitations of the claims. Several limitations are not disclosed or suggested by the references of record. Accordingly, the Examiner has not presented a prima facie case of obviousness of any claim of the Group.

4.3.1. No showing that the references suggest selecting a ticket record having an amount to round up at least as great as the fractional lottery ticket value

Group IV

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On page 10 of the Fourth Office Action, the Examiner concedes that Walker does not disclose such a feature, but The Economist "shows elements that suggest" such a feature.

Clearly, the single paragraph disclosure of The Economist has nothing to do with tickets, ticket records or fractional lottery tickets, much less selecting anything in accordance with a fractional lottery ticket value.

Further, as discussed above, a reference only "suggests" a limitation when there is some showing in the references of record that the prior art would have provided a motivation to modify a reference to result in the "suggested" limitations. There is no showing, purported or otherwise, in any Office Action of facts in the record that would motivate one of ordinary skill in the art to make the proposed modification of The Economist to yield what is purportedly "suggested" by The Economist. The lack of any motivation to combine or modify the references is discussed below.

4.3.2. No showing of a proper motivation to combine the references

The Examiner simply has not shown a motivation in the prior art of record to modify or combine the disparate references in the way suggested by the Examiner, or in any other manner that renders the claims obvious.

In addition to the deficiencies described in Section 1.3.3 above, the Examiner has asserted with respect to claim 9 that one of ordinary skill in the art at the time the invention was made would have combined The Economist with Walker because "such combination would have provided means for 'determining a monetary value ...' (See The Economist (p. 1))." Fourth Office Action, page 7.

The proposed combination (as well as any combination of the references) has nothing to do with the embodiment of claim 9. The Economist has nothing to Group IV

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do with tickets, much less fractional lottery tickets. Similarly, <u>Walker and The</u> Economist have nothing to do with each other.

Further, as described above, any such combination would still lack several features of the claims of the Group, and these features have significant advantages, also as explained above. Further, any such combination would not solve any the problems addressed by the embodiment of the claims of the Group.

Thus the Examiner has not shown a motivation in the prior art of record to modify or combine the references in any manner that renders the claims of the Group obvious.

4.4. The Claims of Group IV are Allowable Over the Cited References

As described above, the Examiner has failed to provide a prima facie showing of obviousness. In addition, the references cannot be combined in any manner that would render the claims of the Group obvious.

4.4.1. The references do not suggest selecting a ticket record having an amount to round up at least as great as the fractional lottery ticket value

The Economist does not even hint at lottery tickets at all. Roberts does not describe fractional lottery tickets, or ticket records. No reference describes selecting a ticket record based on anything related in any way to a fractional lottery ticket value.

Group IV

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4.5. The Claims are Statutory

As described in Sections 1.4 - 1.4.5 above, the claims are directed to statutory subject matter.

In conclusion, the Examiner has not set forth a *prima* facie case of obviousness of the claims of Group IV, none of the references (alone or in combination) disclose or suggest the limitations of the claims of Group IV, and none of the references (alone or in combination) possess the advantages conferred by those limitations, as discussed in detail above in Section 4.2 "Advantages of Dependent Claim 9". Accordingly, for at least those reasons, the claims of Group IV are patentable in view of the cited references.

Group IV

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5. Group V

SEPARATE ARGUMENT OF PATENTABILITY

Group V includes dependent claim 10. Dependent claim 10 depends from independent claim 1, discussed above in Group I. Accordingly, all arguments above with respect to Group I are equally applicable to Group V, and the claims of Group V are patentable at least for the same reasons given above for Group I. Moreover, additional arguments are provided below for the patentability of the claims of Group V, regardless of the patentability of the claims of Group I.

5.1. Dependent Claim 10

Dependent claim 10 is directed to a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal. The method comprises determining a monetary value.

A ticket record that includes a set of ticket numbers is selected by determining a set of ticket records that each have an amount to round up at least as great as a fractional lottery ticket value. A ticket record which has a minimal amount to round up is selected from this set of ticket records.

At least one lottery ticket is purchased based on the monetary value and the set of ticket numbers after the step of selecting. The ticket numbers and the fractional lottery ticket value that is based on the monetary value are output.

Group V

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5.2. Advantages f Dependent Claim 10

The embodiments of claim 10 provide several advantages not even recognized, much less disclosed or suggested, by the prior art of record, either alone or in combination.

In addition to the advantages discussed above with respect to Group I, by determining a set of ticket records that each have an amount to round up at least as great as the fractional lottery ticket value, a set of ticket records with sufficient value remaining to allocate to another fractional lottery ticket may be identified.

As described in the present application, an amount to round up may be, e.g., a minimal amount that, when added to the total value amount of the ticket record, yields a sum that is a whole-number multiple of the corresponding lottery ticket price. Present Application, page 11, lines 14 - 16. This provides information regarding, e.g., how many tickets must be purchased to cover the fractional lottery tickets represented by the ticket record.

By selecting a ticket record from the set of ticket records which has a minimal amount to round up, the ticket record with the minimum amount of value remaining may be selected. This leaves remaining records available for, e.g., subsequent allocation of even larger amounts.

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

5.3. No Prima Facie Showing of Unpatentability of the Claims of Group V

A reading of the rejections of the claims of the Group reveals that the Examiner has consistently ignored or misinterpreted the limitations of the claims. Several limitations are not disclosed or suggested by the references of record.

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Accordingly, the Examiner has not presented a prima facie case of obviousness of any claim of the Group.

5.3.1. No showing that the references suggest determining a set of ticket records that each have an amount to round up at least as great as the fractional lottery ticket value; and selecting a ticket record from the set of ticket records which has a minimal amount to round up

On page 12 of the <u>Fourth Office Action</u>, the Examiner concedes that <u>Walker</u> does not disclose such a feature, but <u>The Economist</u> "shows elements that suggest" such a feature.

Clearly, the single paragraph disclosure of The Economist has nothing to do with tickets, ticket records or fractional lottery tickets, much less selecting anything in accordance with a minimal amount to round up.

Further, as discussed above, a reference only "suggests" a limitation when there is some showing in the references of record that the prior art would have provided a motivation to modify a reference to result in the "suggested" limitations. There is no showing, purported or otherwise, in any Office Action of facts in the record that would motivate one of ordinary skill in the art to make the proposed modification of The Economist to yield what is purportedly "suggested" by The Economist. The lack of any motivation to combine or modify the references is discussed below.

5.3.2. No showing of a proper motivation to combine the references

The Examiner simply has not shown a motivation in the prior art of record to modify or combine the disparate references in the way suggested by the Examiner, or in any other manner that renders the claims obvious.

Group V

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In addition to the deficiencies described in Section L3.3 above, the Examiner has asserted with respect to claim 10 that one of ordinary skill in the art at the time the invention was made would have combined The Economist with Walker because "such combination would have provided means for 'determining a monetary value ...' (See The Economist (p. 1))." Fourth Office Action, page 7. The proposed combination (as well as any combination of the references)

has nothing to do with the embodiment of claim 10. The Economist has nothing to do with tickets, much less fractional lottery tickets. Similarly, Walker and The Economist have nothing to do with each other.

Further, as described above, any such combination would still lack several

features of claim 10, and these features have significant advantages, also as explained above. Further, any such combination would not solve any the problems addressed by the embodiment of claim 10.

Thus the Examiner has not shown a motivation in the prior art of record to

modify or combine the references in any manner that renders the claims of the Group obvious.

5.4. The Claims of Group V are Allowable Over the Cited References
As described above, the Examiner has failed to provide a prima facie
showing of obviousness. In addition, the references cannot be combined in any

manner that would render the claims of the Group obvious.

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5.4.1. The references do not suggest determining a set of ticket records that each have an amount to round up at least as great as the fractional lottery ticket value; and selecting a ticket record from the set of ticket records which has a minimal amount to round up

The Economist does not even hint at lottery tickets at all. Roberts does not describe fractional lottery tickets, or ticket records. No reference discusses selecting a ticket record based on anything related in any way to a minimal amount to round up.

5.5. The Claims are Statutory

As described in Sections 1.4 - 1.4.5 above, the claims are directed to statutory subject matter.

In conclusion, the Examiner has not set forth a *prima* facie case of obviousness of the claims of Group V, none of the references (alone or in combination) disclose or suggest the limitations of the claims of Group V, and none of the references (alone or in combination) possess the advantages conferred by those limitations, as discussed in detail above in Section 5.2 "Advantages of Dependent Claim 10". Accordingly, for at least those reasons, the claims of Group V are patentable in view of the cited references.

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6. Group VI

SEPARATE ARGUMENT OF PATENTABILITY

Group VI includes independent claims 11, 22 and 23, and dependent claims 12 and 13. Independent claim 11 includes all of the limitations of claim 2, discussed above with respect to Group II. Accordingly, all arguments above with respect to Group II are equally applicable to Group VI, and the claims of Group VI are patentable at least for the same reasons given above for Group II.

Moreover, additional arguments are provided below for the patentability of the claims of Group VI, regardless of the patentability of the claims of Group II.

As discussed below, the rejection of the claims of Group VI is flawed because the Examiner has not made a prima facie case of unpatentability of any claim of Group VI. The Examiner has not shown all limitations of any claim to be disclosed or suggested by the references. The rejection is also based on improper combinations and modifications of the references without adequate motivation in the prior art for making the proposed combinations and modifications.

Further, no claim of Group VI can be deemed obvious in light of the references of record, alone or in any combination, because the cited references, alone or in any combination, cannot be interpreted in a manner that would disclose or suggest the limitations of any pending claim. Further, the prior art of record does not contain any proper motivation to combine or modify the references in any way which renders any claim of Group VI obvious.

For brevity, the discussion below refers to independent claim 11, but the arguments are likewise applicable to claims 12, 13, 22 and 23.

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6.1. Independent Claim 11

Independent claim 11 is directed to a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal. The method comprises determining an amount of change due for a purchase, and determining a monetary value based on the amount of change due.

A ticket record that includes a set of ticket numbers is selected. At least one lottery ticket is purchased based on the value and the set of ticket numbers after the step of selecting. The ticket numbers and a fractional lottery ticket value that is based on the monetary value are output.

Independent claim 22 is directed to an apparatus, and includes a processor operative to perform steps substantially as described above with respect to method claim 11.

Independent claim 23 is directed to a computer readable medium encoded with processing instructions for implementing a method substantially as described above with respect to method claim 11.

For brevity, the discussion below refers to method claim 11, but the arguments are likewise applicable to the remaining claims of the Group.

6.2. Advantages of Independent Claim 11

In addition to the advantages discussed above in Section 1.2 with respect to Group I, the embodiment of claim 2 provides several advantages not even recognized, much less disclosed or suggested, by the prior art of record, either alone or in combination. These advantages further render the claimed subject matter nonobvious over the cited art.

By determining an amount of change due for a purchase, the amount of change due may be known. It is advantageous to determine this information Group VI

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because change is generally not highly desired by customers. Thus, many customers will gladly forego their change in exchange for something else (e.g., a fractional lottery ticket). Thus, change can be used to elicit subtle purchasing behavior from customers.

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

6.3. No Prima Facie Showing of Unpatentability of the Claims of Group VI

A reading of the rejections of the claims of the Group reveals that the Examiner has consistently ignored or misinterpreted the limitations of the claims. Several limitations are not disclosed or suggested by the references of record. Accordingly, the Examiner has not presented a prima facie case of obviousness of any claim of the Group.

6.3.1. No showing that the references suggest determining an amount of change due for a purchase

On page 15 of the Fourth Office Action, the Examiner admits that Walker does not disclose such a feature, but that The Economist does.

However, as described in Section 2.3.1 above, an amount of change due is never determined in The Economist. The Economist furthermore teaches away from determining an amount of change due by ignoring any amount of change that would have been due, and instead randomly rounding the price.

Group VI

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6.3.2. No showing of a proper motivation to combine the references

The Examiner simply has not shown a motivation in the prior art of record to modify or combine the disparate references in the way suggested by the Examiner, or in any other manner that renders the claims obvious.

In addition to the deficiencies described in Section 2.3.4 above, the Examiner has asserted with respect to claim 11 that one of ordinary skill in the art at the time the invention was made would have combined The Economist with Walker because "such combination would have provided means for 'determining a monetary value ...' (See The Economist (p. 1))." Fourth Office Action, page 15.

The Economist clearly dispenses with any reason for determining an amount of change due for a purchase. Since prices are randomly rounded either up or down in The Economist, that reference teaches away from anything requiring determining an amount of change due for a purchase. Thus, it is unreasonable to assert that The Economist should be combined at all with anything that requires determining an amount of change due for a purchase, much less for the purported reason of "determining a monetary value".

The proposed combination (as well as any combination of the references) has nothing to do with the embodiment of claim 11. The Economist has nothing to do with tickets, much less fractional lottery tickets. Similarly, Roberts has nothing to do with change due for a purchase, much less fractional lottery tickets, much less a fractional lottery ticket value that is based on the monetary value, which is in turn based on an amount of change due for a purchase.

Further, as described above, any such combination would still lack several features of claim 11, and these features have significant advantages, also as explained above. Further, any such combination would not solve any the problems addressed by the embodiment of claim 11.

Group VI

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Thus the Examiner has not shown a motivation in the prior art of record to modify or combine the references in any manner that renders the claims of the Group obvious.

6.4. The Claims are Statutory

As described in Sections 1.4 - 1.4.5 above, the claims are directed to statutory subject matter.

In conclusion, the Examiner has not set forth a *prima* facie case of obviousness of the claims of Group VI, none of the references (alone or in combination) disclose or suggest the limitations of the claims of VI, and none of the references (alone or in combination) possess the advantages conferred by those limitations, as discussed in detail above in Section 6.2 "Advantages of Dependent Claim 11". Accordingly, for at least those reasons, the claims of Group VI are patentable in view of the cited references.

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7. Group VII

SEPARATE ARGUMENT OF PATENTABILITY

Group VII includes dependent claim 14. Dependent claim 14 depends from independent claim 11, discussed above in Group VI. Accordingly, all arguments above with respect to Group VI are equally applicable to Group VII, and the claims of Group VII are patentable at least for the same reasons given above for Group VI.

Moreover, additional arguments are provided below for the patentability of the claims of Group VII, regardless of the patentability of the claims of Group VI.

As discussed below, the rejection of the claims of Group VII is flawed because the Examiner has not made a prima facie case of unpatentability of any claim of Group VII. The Examiner has not shown all limitations of any claim to be disclosed or suggested by the references. The rejection is also based on improper combinations and modifications of the references without adequate motivation in the prior art for making the proposed combinations and modifications.

Further, no claim of Group VII can be deemed obvious in light of the references of record, alone or in any combination, because the cited references, alone or in any combination, cannot be interpreted in a manner that would disclose or suggest the limitations of any pending claim. Further, the prior art of record does not contain any proper motivation to combine or modify the references in any way which renders any claim of Group VII obvious.

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7.1. Dependent Claim 14

Dependent claim 14 is directed to a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal. The method comprises determining an amount of change due for a purchase, and determining a monetary value based on the amount of change due. An offer to exchange a fractional lottery ticket for change due is output.

A ticket record that includes a set of ticket numbers is selected. At least one lottery ticket is purchased based on the value and the set of ticket numbers after the step of selecting. The ticket numbers and a fractional lottery ticket value that is based on the monetary value are output.

7.2. Advantages of Dependent Claim 14

In addition to the advantages discussed above with respect to Group VI, the embodiment of claim 14 provides several advantages not even recognized, much less disclosed or suggested, by the prior art of record, either alone or in combination. These advantages render the claimed subject matter nonobvious over the cited art.

By outputting an offer to exchange a fractional lottery ticket for change due, a customer may be informed of the opportunity to exchange his change due (which is typically not desirable) for a fractional lottery ticket (which is often highly desirable to certain people). Since the offer is for something (change due) that is frequently undesirable, the offer is likely to be accepted. Thus, increased sales of tickets can result.

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

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7.3. No Prima Facie Showing of Unpatentability of the Claims of Group VII

A reading of the rejections of the claims of the Group reveals that the Examiner has consistently ignored or misinterpreted the limitations of the claims. Several limitations are not disclosed or suggested by the references of record. Accordingly, the Examiner has not presented a prima facie case of obviousness of any claim of the Group.

7.3.1. No showing that the references suggest outputting an offer to exchange a fractional lottery ticket for change due

The Examiner concedes that the cited portion of Walker does not disclose such a feature, but The Economist "shows elements that suggest" such a feature. Fourth Office Action, page 18.

A goal of the system described in The Economist is to eliminate change in transactions by rounding prices up or down randomly. The Economist certainly does not suggest that *change due* should be exchanged for anything; in The Economist any losses in rounded-up prices are hoped to be counterbalanced by gains in rounded-down prices in the long run, due to the laws of probability.

Further, The Economist clearly has no suggestion of tickets of any sort, much less fractional lottery tickets.

Finally, The Economist clearly has no offers of any sort - purchase prices are rounded at random.

Further, as discussed above, a reference only "suggests" a limitation when there is some showing in the references of record that the prior art would have provided a motivation to modify a reference to result in the "suggested" limitations. There is no showing, purported or otherwise, in any Office Action of facts in the record that would motivate one of ordinary skill in the art to make the Group VII

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proposed modification of The Economist to yield what is purportedly "suggested" by The Economist. The lack of any motivation to combine or modify the references is discussed below.

7.3.2. No showing of a proper motivation to combine the references

The Examiner simply has not shown a motivation in the prior art of record to modify or combine the disparate references in the way suggested by the Examiner, or in any other manner that renders the claims obvious.

In addition to the deficiencies described above, the Examiner has asserted with respect to claim 14 that one of ordinary skill in the art at the time the invention was made would have combined The Economist with Walker because "such combination would have provided means for 'determining a monetary value ...' (See The Economist (p. 1))." Fourth Office Action, page 18.

However, the combination of The Economist and Walker has nothing to do with the embodiment of claim 14, as discussed above in Sections 7.3.1.

The proposed combination (as well as any combination of the references) has nothing to do with the embodiment of claim 14. The Economist has nothing to do with offers to exchange change due, nor fractional lottery tickets, much less an offer to exchange a fractional lottery ticket for change. Similarly, Roberts has nothing to do with change due, nor fractional lottery tickets, much less an offer to exchange a fractional lottery ticket for change.

Further, as described above, any such combination would still lack several features of claim 14, and these features have significant advantages, also as explained above. Further, any such combination would not solve any the problems addressed by the embodiment of claim 14.

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Thus the Examiner has not shown a motivation in the prior art of record to modify or combine the references in any manner that renders the claims of the Group obvious.

7.4. The Claims of Group VII are Allowable Over the Cited References

As described above, the Examiner has failed to provide a prima facie showing of obviousness. In addition, the references cannot be combined in any manner that would render the claims of the Group obvious.

7.4.1. The references do not suggest outputting an offer to exchange a fractional lottery ticket for change due

Roberts does not mention change due, nor offers, much less an offer to exchange a fractional lottery ticket for change due. As discussed in Section 2.3.1 above, The Economist seeks to eliminate change due by randomly rounding prices (not amounts of change) up or down. Thus, The Economist teaches away from using such change for anything (e.g., in exchange for a fractional lottery ticket). The Economist also lacks any hint of offers or fractional lottery tickets.

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7.5. The Claims are Statutory

As described in Sections 1.4 - 1.4.5 above, the claims are directed to statutory subject matter.

In conclusion, the Examiner has not set forth a *prima* facie case of obviousness of the claims of Group VII, none of the references (alone or in combination) disclose or suggest the limitations of the claims of Group VII, and none of the references (alone or in combination) possess the advantages conferred by those limitations, as discussed in detail above in Section 7.2 "Advantages of Dependent Claim 14". Accordingly, for at least those reasons, the claims of Group VII are patentable in view of the cited references.

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8. Group VIII

SEPARATE ARGUMENT OF PATENTABILITY

Group VIII includes independent claims 16, 26 and 27 and dependent claims 17, 18 and 19.

As discussed below, the rejection of the claims of Group VIII is flawed because the Examiner has not made a prima facie case of unpatentability of any claim of Group VIII. The Examiner has not shown all limitations of any claim to be disclosed or suggested by the references. The rejection is also based on improper combinations and modifications of the references without adequate motivation in the prior art for making the proposed combinations and modifications.

Further, no claim of Group VIII can be deemed obvious in light of the references of record, alone or in any combination, because the cited references, alone or in any combination, cannot be interpreted in a manner that would disclose or suggest the limitations of any pending claim. Further, the prior art of record does not contain any proper motivation to combine or modify the references in any way which renders any claim of Group VIII obvious.

8.1. Independent Claims 16, 26 and 27

Independent claim 16 is directed to a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal. The method comprises determining a total value amount corresponding to a set of ticket numbers. At least one lottery ticket having the set of ticket numbers based on the total value amount is acquired.

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Independent claim 26 is directed to an apparatus, and includes a processor operative to perform steps substantially as described above with respect to method claim 16.

Independent claim 27 is directed to a computer readable medium encoded with processing instructions for implementing a method substantially as described above with respect to method claim 16.

For brevity, the discussion below refers to method claim 16, but the arguments are likewise applicable to the remaining claims of the Group.

8.2. Advantages of Independent Claim 16

The embodiment of claim 16 provides several advantages not even recognized, much less disclosed or suggested, by the prior art of record, either alone or in combination. These advantages render the claimed subject matter nonobvious over the cited art.

By determining a total value amount corresponding to a set of ticket numbers, one may determine, e.g., the value of all fractional lottery tickets that have those ticket numbers. Such data may be used to indicate, e.g., when additional tickets should be acquired.

By acquiring at least one lottery ticket having the set of ticket numbers based on the total value amount, lottery tickets may be acquired when needed to cover the fractional lottery tickets represented by the total value amount. Thus a business can, e.g., provide fractional lottery tickets to customers and then acquire a group of corresponding lottery tickets before the drawing date. The prizes won by the group of lottery tickets are received by the business, which in turn pays shares of the prizes to customers based on the portions defined by the values of the fractional lottery tickets. Present Application, page 7, lines 3 - 6.

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A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

8.3. No Prima Facie Showing of Unpatentability of the Claims of Group VIII

A reading of the rejections of the claims of the Group reveals that the Examiner has consistently ignored or misinterpreted the limitations of the claims. Several limitations are not disclosed or suggested by the references of record. Accordingly, the Examiner has not presented a prima facie case of obviousness of any claim of the Group.

8.3.1. No showing that the references suggest determining a total value amount corresponding to a set of ticket numbers

The Examiner has not shown that the references, alone or in combination, suggest determining a total value amount corresponding to a set of ticket numbers.

On pages 21 - 22 of the Fourth Office Action, the Examiner concedes that Roberts does not disclose such a feature, but Walker "admits the elements and limitations of claim 16 are well known". No explanation is provided for how Walker "admits" anything other than the German lottery practice of selling half and quarter shares of lottery tickets.

It is clear that the cited portion of Walker has nothing to do with a "total value amount", much less anything corresponding to "a set of ticket numbers".

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8.3.2. No showing that the r ferences suggest acquiring at least one lottery ticket having the set of ticket numbers based on the total value amount

The Examiner has not shown that the references, alone or in combination, suggest acquiring at least one lottery ticket having the set of ticket numbers based on the total value amount.

On page 23 of the Fourth Office Action, the Examiner concedes that Roberts does not disclose such a feature, but Nilssen "shows elements that suggest" such a feature. The portions of Nilssen that purportedly suggest this feature (col. 6, lines 24 - 40) merely disclose that funds are invested, and a lottery ticket reflects a certain small fraction of this total net value.

Nilssen has nothing at all to do with acquiring at least one lottery ticket, much less acquiring at least one lottery ticket having any particular ticket numbers, much less acquiring at least one lottery ticket having the set of ticket numbers based on the total value amount.

8.3.3. No showing of a proper motivation to combine the references

The Examiner simply has not shown a motivation in the prior art of record to modify or combine the disparate references in the way suggested by the Examiner, or in any other manner that renders the claims obvious.

In the rejection of claim 16, the Examiner has provided two motivations to combine the Walker, Roberts and Nilssen references.

First, it is asserted that one of ordinary skill in the art at the time the invention was made would have combined Roberts with Walker because "such combination would have provided means for '[sending] ... ticket completion information necessary to provide a completed lottery ticket ... ' (See Roberts (col. 6, 11. 54 – 55))." Fourth Office Action, pages 22 - 23.

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Second, it is asserted that one of ordinary skill in the art at the time the invention was made would have combined Nilssen with Roberts because "such combination would have provided means to '[provide] ... a lottery process and system operative to increasing the average monetary return from an investment in a lottery ticket ...' (See Nilssen (Col. 1, 1l. 25 - 30))." Fourth Office Action, page 23.

Both motivations fail for three reasons:

- (a) neither motivation would actually have prompted one to make the proposed combination;
- (b) neither combination would in any way further the proposed motivation; and
- (c) neither combination has anything to do with the embodiment of claim 16, as discussed above in Sections 8.3.1 and 8.3.2.

With respect to reason (a) and (b), the first motivation, "providing a means for sending ticket completion information" is discussed in Section 1.3.3 above.

With respect to reason (a), the second motivation, "increasing the average monetary return from an investment in a lottery ticket", would not cause one to seek out lottery ticket fraud prevention, much less the particular method of Roberts. In fact, apart from involving lottery tickets, there is no way in which the system of Roberts could work with the investment system disclosed in Nilssen.

With respect to reason (b), the second combination (Roberts and Nilssen) does not further the proposed motivation of "increasing the average monetary return from an investment in a lottery ticket". Whatever means in Roberts for determining detecting fraud would seem to be unaltered by the return-related machinations of Nilssen.

Group VIII

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With respect to reason (c), the first and second combinations (as well as any combination of the references) have nothing to do with the embodiment of claim 16. Further, as described above, any such combination would still lack several features of claim 16, and these features have significant advantages, also as explained above. Further, any such combination would not solve any the problems addressed by the embodiment of claim 16.

Thus the Examiner has not shown a motivation in the prior art of record to modify or combine the references in any manner that renders the claims of the Group obvious.

8.4. The Claims of Group VIII are Allowable Over the Cited References

As described above, the Examiner has failed to provide a prima facie showing of obviousness. In addition, the references cannot be combined in any manner that would render the claims of the Group obvious.

8.4.1. The references do not suggest determining a total value amount corresponding to a set of ticket numbers

It is clear that no reference of record in any way involves determining anything corresponding to a set of ticket numbers, much less determining a total value amount corresponding to a set of ticket numbers.

Walker does not suggest such a feature, as discussed in Section 8.3.1 above. The Economist has nothing to do with tickets of ticket numbers. Roberts does not at all determine a total value amount, much less a total value amount corresponding to a set of ticket numbers. Nilssen also does not at all determine a total value amount, much less a total value amount corresponding to a set of ticket numbers.

Group VIII

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8.4.2. The references d not sugg st acquiring at least one lottery ticket having the set of ticket numbers based on the total value amount

It is clear that no reference of record in any way involves acquiring at least one lottery ticket having particular ticket numbers, much less acquiring at least one lottery ticket having the set of ticket numbers based on the total value amount.

The deficiencies of Roberts and Nillsen are discussed in Section 8.3.2 above. The Economist has nothing to do with tickets of ticket numbers. Walker does not suggest anything to do with acquiring at least one lottery ticket having the set of ticket numbers, much less doing so based on the total value amount.

8.5. The Claims are Statutory

As described in Sections 1.4 - 1.4.5 above, the claims are directed to statutory subject matter.

In conclusion, the Examiner has not set forth a *prima* facie case of obviousness of the claims of Group VIII, none of the references (alone or in combination) disclose or suggest the limitations of the claims of Group VIII, and none of the references (alone or in combination) possess the advantages conferred by those limitations, as discussed in detail above in Section 8.2 "Advantages of Independent Claim 16". Accordingly, for at least those reasons, the claims of Group VIII are patentable in view of the cited references.

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CONCLUSION

Thus, the Examiner's rejection of the pending claims are is improper at least because the all pending claims are directed to statutory subject matter. In addition, the references, alone or in combination, do not disclose or suggest all the limitations of any claim. In addition, in the obviousness rejections the Examiner has improperly combined the references because there is no adequate reasoning or support in the prior art for making the proposed combination. Therefore, Appellants respectfully request that the Examiner's rejections be reversed.

If any issues remain, or if there are any further suggestions for expediting allowance of the present application, please contact Dean Alderucci using the information provided below.

Appellants hereby request any extension of time that may be required to make this Appeal Brief timely. Please charge any fees that may be required for this paper, or credit any overpayment, to Deposit Account No. 50-0271.

Respectfully submitted,

June 2, 2004 Date

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APPENDIX A CLEAN COPY OF CLAIMS INVOLVED IN THE APPEAL

Claims 1-27 are pending and appealed.

Claims 1, 11, 15, 16 and 20 - 27 are independent.

A method for facilitating the purchase of fractional lottery tickets using a 1. point-of-sale terminal, comprising:

determining a monetary value;

selecting a ticket record that includes a set of ticket numbers;

purchasing at least one lottery ticket based on the monetary value and the set of ticket numbers after the step of selecting; and

outputting the ticket numbers and a fractional lottery ticket value that is based on the monetary value.

2. The method of claim 1, in which the step of determining a monetary value comprises:

determining a monetary value based on an amount of change due for a purchase.

3. The method of claim 1, in which the step of selecting comprises: creating the ticket record.

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- 4. The method of claim 1, in which the step of selecting comprises: selecting a ticket record randomly.
- The method of claim 1, further comprising:
 receiving a signal indicating selected ticket numbers.
- 6. The method of claim 5, in which the step of selecting comprises:
 searching a plurality of ticket records to select a ticket record that indicates
 the selected ticket numbers.
- 7. The method of claim 1, further comprising: increasing a total value amount of the selected ticket record in accordance with the fractional lottery ticket value.
- The method of claim 7, further comprising:
 adjusting an amount to round up based on the increased total value amount.
- 9. The method of claim 1, in which the step of selecting comprises: selecting a ticket record having an amount to round up at least as great as the fractional lottery ticket value.

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10. The method of claim 1, in which the step of selecting comprises:

determining a set of ticket records that each have an amount to round up at least as great as the fractional lottery ticket value; and

selecting a ticket record from the set of ticket records which has a minimal amount to round up.

11. A method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

determining an amount of change due for a purchase; determining a monetary value based on the amount of change due; selecting a ticket record that includes a set of ticket numbers;

purchasing at least one lottery ticket based on the value and the set of ticket numbers after the step of selecting; and

outputting the ticket numbers and a fractional lottery ticket value that is based on the monetary value.

12. The method of claim 11, in which the step of determining a monetary value comprises:

rounding the amount of change due to a predetermined multiple, thereby generating a rounded change amount; and

setting the monetary value equal to the rounded change amount.

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13. The method of claim 12, in which the step of rounding the amount of change due comprises:

rounding down the amount of change due to a predetermined multiple, thereby generating a rounded-down change amount.

- 14. The method of claim 11, further comprising:
 outputting an offer to exchange a fractional lottery ticket for change due.
- 15. A method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

determining a monetary value;

selecting a ticket record that includes a set of ticket numbers;

purchasing at least one lottery ticket based on the value and the set of ticket numbers after the step of selecting; and

outputting the ticket numbers and a fractional lottery ticket value that is based on the monetary value;

determining a prize value of the at least one lottery ticket; and providing a portion of the prize value based on the fractional lottery ticket value.

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16. A method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

determining a total value amount corresponding to a set of ticket numbers; and

acquiring at least one lottery ticket having the set of ticket numbers based on the total value amount.

- 17. The method of claim 16, in which the step of acquiring is performed at predefined periods.
- 18. The method of claim 16, in which the step of acquiring is performed at a predefined time before a drawing.
- 19. The method of claim 16, further comprising:

determining an amount to round up based on the total value amount; and in which the step of acquiring is performed when the amount to round up is below a predetermined value.

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20. An apparatus for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

a storage device; and

a processor connected to the storage device,

the storage device storing a program for controlling the processor; and the processor operative with the program to:

determine a monetary value;

select a ticket record that includes a set of ticket numbers;

purchase at least one lottery ticket based on the monetary value and the set of ticket numbers after the step of selecting; and

output the ticket numbers and a fractional lottery ticket value that is based on the monetary value.

21. A computer readable medium encoded with processing instructions for implementing a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, the method comprising:

determining a monetary value;

selecting a ticket record that includes a set of ticket numbers;

purchasing at least one lottery ticket based on the monetary value and the set of ticket numbers after the step of selecting; and

outputting the ticket numbers and a fractional lottery ticket value that is based on the monetary value.

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22. An apparatus for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

a storage device; and

a processor connected to the storage device,

the storage device storing a program for controlling the processor; and the processor operative with the program to:

determine an amount of change due for a purchase; determine a monetary value based on the amount of change due;

select a ticket record that includes a set of ticket numbers;

purchase at least one lottery ticket based on the value and the set of ticket numbers after the step of selecting; and

output the ticket numbers and a fractional lottery ticket value that is based on the monetary value.

23. A computer readable medium encoded with processing instructions for implementing a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, the method comprising:

determining an amount of change due for a purchase;

determining a monetary value based on the amount of change due;

selecting a ticket record that includes a set of ticket numbers;

purchasing at least one lottery ticket based on the value and the set of ticket numbers after the step of selecting; and

outputting the ticket numbers and a fractional lottery ticket value that is based on the monetary value.

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24. An apparatus for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

a storage device; and

a processor connected to the storage device,

the storage device storing a program for controlling the processor; and the processor operative with the program to:

determine a monetary value;

select a ticket record that includes a set of ticket numbers;

purchase at least one lottery ticket based on the value and the set of ticket numbers after the step of selecting; and

output the ticket numbers and a fractional lottery ticket value that is based on the monetary value;

determine a prize value of the at least one lottery ticket; and provide a portion of the prize value based on the fractional lottery ticket value.

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25. A computer readable medium encoded with processing instructions for implementing a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, the method comprising:

determining a monetary value;

selecting a ticket record that includes a set of ticket numbers;

purchasing at least one lottery ticket based on the value and the set of ticket numbers after the step of selecting; and

outputting the ticket numbers and a fractional lottery ticket value that is based on the monetary value;

determining a prize value of the at least one lottery ticket; and providing a portion of the prize value based on the fractional lottery ticket value.

26. An apparatus for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

a storage device; and

a processor connected to the storage device,

the storage device storing a program for controlling the processor; and the processor operative with the program to:

determine a total value amount corresponding to a set of ticket numbers; and

acquire at least one lottery ticket having the set of ticket numbers based on the total value amount.

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27. A computer readable medium encoded with processing instructions for implementing a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

determining a total value amount corresponding to a set of ticket numbers; and

acquiring at least one lottery ticket having the set of ticket numbers based on the total value amount.

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APPENDIX B CHART SHOWING CLAIM DEPENDENCIES

Claims 1 - 27 are pending and appealed.

Claims 1, 11, 15, 16 and 20 - 27 are independent.

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CHART SHOWING CLAIM DEPENDENCIES